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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,933	04/09/2001	Rainer K. Schmid	032004-005	6673

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EXAMINER

MOHANDESI, JILA M

ART UNIT	PAPER NUMBER
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3728

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/827,933

Applicant(s)

SCHMID, RAINER K.

Examiner

Jila M Mohandesi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 6, 8-15 and 17-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-6, 8-15 and 17-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 20 is objected to because of the following informalities: In claim 20, line 4, "the upper rigid plate" should be —the upper plate—to more closely mirror the language used when the element was first introduced. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2-3, 5-6, 8-15 and 17- 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horibata '084 in view of Schmid (4,858,338). Horibata '084 discloses an article of footwear comprising: an upper (1); an outsole (base 3) defining a ground engaging surface; a sole disposed between said upper and said outsole, said sole including an energy return system; wherein said energy return system comprises a first plate, a second plate (See column 3, lines 20-27) spaced a predetermined distance from said first plate, at least one elastomeric separating element (coil springs 2) disposed there between to maintain the spacing between said plates. Horibata '084 is silent about the specifics of the material of the plates. Schmid '338 discloses an insert/sole (20) for a an article of footwear where the insert/sole is deflecting while it absorbs, stores and returns the kinetic energy of a wearer to the wearer's foot. The insert/sole (20) is made of an elastic material which is defined as a high tensile strength

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material which has a modulus of elasticity of at least 32X10 lb/in made of a plurality of Graphite fibers. Graphite fibers have the advantages that they have a high tensile strength, a high modulus of elasticity, are lightweight, and can be easily processed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the plates of Horibata '084 from plurality of Graphite fibers as taught by Schmid '338 to enhance the energy return properties of the energy return system. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Inasmuch as applicant's elastomeric plates deflect and store energy so will the plates of Horibata '084 as modified above. The modified plates will inherently return to non-deflected state and release stored energy during a gait cycle.

With respect to claim 13, the insert/sole of Schmid '338 discloses a rocker bottom (28) to cradle the first metatarsal head of the foot of the wearer. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a rocker bottom to the first and second rigid plates of Horibata '084 as taught by Schmid '338 to better cradle the foot of the wearer.

With respect to claims 14, 15, 34, 37 and 39 and the size of the plates, it would have been an obvious matter of design choice to modify the size of the plates, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955).

With respect to claim 6, note the arcuate separating elements (spring coils 2) in Figure 1 embodiment.

With respect to claims 5, 17, 21, 22, 23, 25, 26, 27, 29, 30 and 31, note the two separating elements (spring coils 2) in Figure 1 embodiment which allow the first and second plates to move independently of one another in all dimensions.

4. Claims 8-11, 14-15, 18-19 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox '500 in view of Schmid (4,858,338). Cox '500 discloses an energy return system for use in a shoe sole, said system comprising: a first plate (bottom 14); a second plate (sole 17) spaced a predetermined distance from said first rigid plate; at least one elastomeric separating element (elevating extension 16, see column 2, lines 48-50), maintaining the distance between said first and second rigid plates, the separating element allowing independent movement of the first and second rigid plates with respect to one another in multiple dimensions including medial lateral movement and vertical movement. See Figures 1-13 embodiments. Cox '500 is silent about the specifics of the material of the plates. Schmid '338 discloses an insert/sole (20) for an article of footwear where the insert/sole absorbs, stores and returns the kinetic energy of a wearer to the wearer's foot. The insert/sole (20) is made of an elastic material which is defined as a high tensile strength material which has a modulus of elasticity of at least  $32 \times 10^6$  lb/in made of a plurality of Graphite fibers. Graphite fibers have the advantages that they have a high tensile strength, a high modulus of elasticity, are lightweight, and can be easily processed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the rigid

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plates of Cox '500 from plurality of Graphite fibers as taught by Schmid '338 to enhance the energy return properties of the energy return system. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Inasmuch as applicant's elastomeric plates deflect and store energy so will the plates of Cox '500 as modified above. The modified plates will inherently return to non-deflected state and release stored energy during a gait cycle.

5. Claims 8-11,13, 17-19 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miceli '395 in view of Schmid (4,858,338). Miceli '395 discloses an energy return system for use in a shoe sole, said system comprising: a first plate (plate 1); a second plate (plate 2), at least one elastomeric separating element (spherical connecting pieces 3, see column 2, lines 1-3) maintaining the distance between said first and second plates and allowing independent movement of the first and second rigid plates with respect to one another in multiple dimensions including medial lateral movement and vertical movement. See Figure 2 embodiment. Miceli '395 is silent about the material of the plates. Schmid '338 discloses an insert/sole (20) for a an article of footwear where the insert/sole absorbs, stores and returns the kinetic energy of a wearer to the wearer's foot. The insert/sole (20) is made of an elastic material which is defined as a high tensile strength material which has a modulus of elasticity of at least 32X10 lb/in made of a plurality of Graphite fibers. Graphite fibers have the advantages that they have a high tensile strength, a high modulus of elasticity, are lightweight, and

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can be easily processed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the rigid plates of Miceli '395 from plurality of Graphite fibers as taught by Schmid '338 to enhance the energy return properties of the energy return system. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

With respect to claim 13, the insert/sole of Schmid '338 discloses a rocker bottom (28) to cradle the first metatarsal head of the foot of the wearer. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a rocker bottom to the first and second rigid plates of Miceli '395 as taught by Schmid '338 to better cradle the foot of the wearer.

Inasmuch as applicant's elastomeric plates deflect and store energy so will the plates of Miceli '395 as modified above. The modified plates will inherently return to non-deflected state and release stored energy during a gait cycle.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-3,5-6, 8-15 and 17-39 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jila M Mohandesi whose telephone number is (703) 305-7015. The examiner can normally be reached on Monday-Friday 7:30-4:00 (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on (703) 308-2672. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jila M Mohandesi




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**JILA M. MOHANDESI**  
**PRIMARY EXAMINER**



Primary Examiner  
Art Unit 3728

JMM  
March 10, 2004